FIG.1 MULTIPLE VIDEO ENCODERS
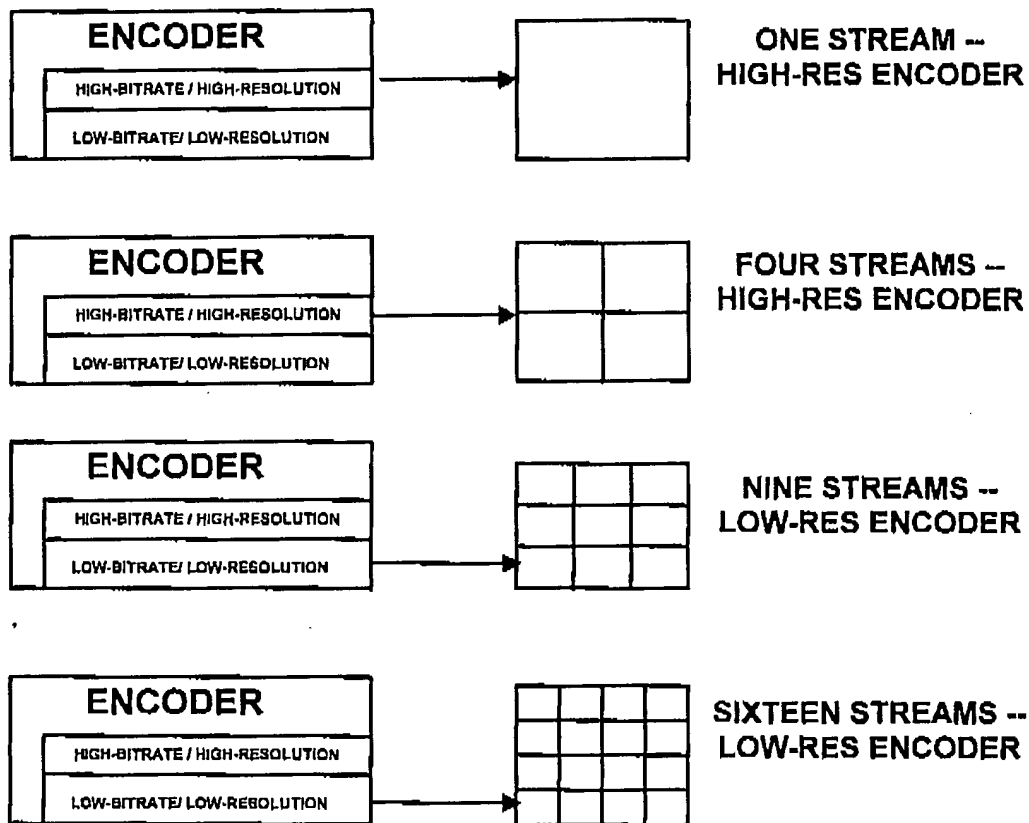
SERVER

SWITCH/
ROUTER

ENCODER

CLIENT

2
SERVER INFORMS
CLIENT OF THE
ENCODER'S IP
ADDRESS

1
CLIENT REQUESTS
IP ADDRESS OF
DESIRED ENCODER

5
CLIENT CONNECTS
TO MULTICAST
ADDRESS SPECIFIED

4
ENCODER RETURNS
FILE

3
CLIENT REQUESTS
FILE CONTAINING
MULTICAST ADDRESS

Fig. 2 MULTICAST ADDRESS RESOLUTION

MAP DISPLAY
AREA

VIDEO DISPLAY
AREA

CAMERA
ICONS

MOUSE
POINTER

FIG. 3
SCREEN LAYOUT

ENCODER
HIGH-BITRATE / HIGH-RESOLUTION
LOW-BITRATE/ LOW-RESOLUTION

ONE STREAM --
HIGH-RES ENCODER

ENCODER
HIGH-BITRATE / HIGH-RESOLUTION
LOW-BITRATE/ LOW-RESOLUTION

FOUR STREAMS --
HIGH-RES ENCODER

ENCODER
HIGH-BITRATE / HIGH-RESOLUTION
LOW-BITRATE/ LOW-RESOLUTION

NINE STREAMS --
LOW-RES ENCODER

ENCODER
HIGH-BITRATE / HIGH-RESOLUTION
LOW-BITRATE/ LOW-RESOLUTION

SIXTEEN STREAMS --
LOW-RES ENCODER

FIG. 4 -- BANDWIDTH CONSERVATION